

**Notice of Allowability**

Application No.

09/923,910

Examiner

Jason C Olson

Applicant(s)

BRUNETT ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/17/2004.
2. ☒ The allowed claim(s) is/are 1-57.
3. ☒ The drawings filed on 17 September 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 09/20/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

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This Office action is in response to an amendment filed on 09/17/2004

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: Claims 1-57 are allowed as the prior art does not teach or suggest the applicant's invention. The amended claim language and the applicant's remarks in response to the Office Action (paper mailed on 03/11/2004) distinguish the application's invention over the references that accompanied the Office Action. Claims 1, 18, 20, 37-39, 45-47, and 53-57 teach a method and apparatus for a disk drive. Regarding amended claims 1 and 20 and new claims 54 and 56, the distinguishing elements of the claims teach delivering a plurality of host blocks from the host computer to the disk drive via an interface, wherein each of the plurality of host blocks have a predetermined length, wherein the host blocks are not compressed while being delivered from the host computer to the disk drive; and, appending the host blocks to one another to form a disk block having a length, wherein the length of the disk block is equal to  $N$  times the length of each host block, where  $N$  is a natural number greater than 1. Regarding amended claims 18 and 37 and new claims 55 and 57, the distinguishing elements of the claims teach storing data on a disk surface in a disk block having a predetermined length; and presenting data from a disk drive to an interface as a host block having a predetermined length, wherein the predetermined length of the disk block is equal to  $N$  times the predetermined length of the host block, where  $N$  is a natural number greater than 1, and wherein the host block is not decompressed. Regarding new claims 38 and 46, the distinguishing elements of the claims teach delivering a plurality of host blocks from a host computer to a disk drive via an interface, wherein each of the plurality of host blocks

have a predetermined length; appending the host blocks to one another to form a disk block having a length, wherein the length of the disk block is equal to  $N$  times the length of each host block, where  $N$  is a natural number greater than 1, wherein the disk block forms part of a disk sector that is stored in a data sector on a disk surface; storing a copy of the disk sector in a safety sector when a write operation is performed, wherein the copy of the disk sector is stored in the safety sector when less than  $N$  host sectors are to be overwritten in the disk sector. Regarding new claims 39 and 47, the distinguishing elements of the claims teach delivering a plurality of host blocks from a host computer to a disk drive via an interface, wherein each of the plurality of host blocks have a predetermined length; appending the host blocks to one another to form a disk block having a length, wherein the length of the disk block is equal to  $N$  times the length of each host block, where  $N$  is a natural number greater than 1, wherein the disk block forms part of a disk sector that is stored in a data sector on a disk surface; storing a copy of the disk sector in a safety sector when a write operation is performed, wherein the data sector has an address and wherein an identifier is stored in the copy of the disk sector to identify the address of the data sector. Regarding new claims 45 and 53, the distinguishing elements of the claims teach delivering a plurality of host blocks from a host computer to a disk drive via an interface, wherein each of the plurality of host blocks have a predetermined length; appending the host blocks to one another to form a disk block having a length, wherein the length of the disk block is equal to  $N$  times the length of each host block, where  $N$  is a natural number greater than 1, wherein the disk block forms part of a disk sector that is stored in a data sector on a disk surface; storing a copy of the disk sector in a safety sector when a write operation is performed, wherein the safety sector is at a location on the disk surface which corresponds with a track of the data

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sector and wherein the safety sector is at a location which is offset from the track of the data sector, so as to avoid microjogging.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Don et al. (US 6,324,604) is cited for storing data in a disk block size from fixed length of host blocks in non-integer multiple of the disk block size.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason C Olson whose telephone number is (571)272-7560. The examiner can normally be reached on Monday thru Thursday 7:30-5:30; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571)272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCO  
January 24, 2005



DAVID HUDSPETH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600